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Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complets if Known</b>	
				Application No.	09/707,737
				Filing Date	11/6/00
				First Named Inventor	Quake
				Art Unit	1634
				Examiner Name	Chakrabarti
Sheet	5	Of	5	Attorney Docket No.	30260.702.501

[illegible]

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Page 1 of 10

Application Number	09/707,737
Filing Date	November 8, 2000
First Named Inventor	
Art Unit	1655
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

U.S. PATENT DOCUMENTS					
Examiner	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
9/27/04	A1	US-4,119,388		10/10/1978	Yamakazi
	A2	US-4,344,084		08/10/1982	Biller et al.
	A3	US-4,707,237		11/17/1987	Lepp et al.
	A4	US-4,783,705		12/27/1988	Shers
	A5	US-4,971,903		11/20/1990	Hymen
	A6	US-4,979,824		12/25/1990	Mathies et al.
	A7	US-4,994,373		02/19/1991	Stavrianopoulos
	A8	US-5,085,562		02/04/1992	Van Lintel
	A9	US-5,091,852		02/25/1992	Mathies et al.
	A10	US-5,098,388		03/17/1992	Weinberg
	A11	US-5,143,854		09/01/1992	Pirung et al.
	A12	US-5,171,132		12/15/1992	Miyazaki
	A13	US-5,224,843		07/06/1993	Van Lintel
	A14	US-5,242,787		09/07/1993	Hirschfeld
	A15	US-5,259,737		11/09/1993	Kamisaki et al.
	A16	US-5,302,509		04/12/1994	Chessman
	A17	US-5,304,487		04/19/1994	Widing et al.
	A18	US-5,336,082		08/09/1994	Richter
	A19	US-5,375,979		12/27/1994	Trah
	A20	US-5,376,252		12/27/1994	Ekstrom
	A21	US-5,405,747		04/11/1995	Jett et al.
	A22	US-5,424,186		08/13/1995	Fodor et al.
	A23	US-5,529,465		08/25/1996	Zengerle et al.
	A24	US-5,599,895		02/04/1997	Pease et al.
	A25	US-5,705,018		01/06/1998	Hartley
	A26	US-5,776,782		07/07/1998	Tsuij
	A27	US-5,831,070		11/03/1998	Pease et al.
	A28	US-5,832,185		11/03/1998	Reichert et al.
	A29	US-5,836,730		11/17/1998	Cebuz
	A30	US-5,846,398		12/08/1998	Zanzucchi et al.
	A31	US-5,881,287		01/19/1999	Metzkar et al.
	A32	US-5,908,755		08/01/1999	Kumar et al.
	A33	US-5,945,283		08/31/1999	Kwok et al.
	A34	US-5,959,781		09/28/1999	Kirtz et al.

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Page **3** of **10**

Application Number	09/707,737
Filing Date	November 6, 2000
First Named Inventor	
Art Unit	1855
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-00181005

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## **U.S. PATENT DOCUMENTS**

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1				

## **FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>2</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
9/28/04	B1	PCT	WO 00/50642	A1	08/31/2000			<input type="checkbox"/>
	B2							<input type="checkbox"/>

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1		

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Page 2 of 12

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Art Unit	1655
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Attorney Docket Number	20174C-001810US

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	A35	US-5,908,755	08/01/1999	Kumar et al.	CL/SUB
	A36	US-5,945,283	08/31/1999	Kwok et al.	---
	A37	US-5,959,781	09/28/1999	Kintz et al.	---
	A38	US-5,985,448	10/12/1999	Ishikawa, Mitsuru	---
	A39	US-6,007,309	12/28/1999	Hartley	---
	A40	US-6,020,457	02/01/2000	Klimash et al.	---
	A41	US-6,043,080	03/28/2000	Lipshutz et al.	---
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	A43	US-6,107,044	08/22/2000	Nikiforov	---
	A44	US-6,132,580	10/17/2000	Mathies et al.	---
	A45	US-6,136,212	10/24/2000	Mastrangelo et al.	---
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	A47	US-6,210,896 B1	04/03/2001	Chen	---
	A48	US-6,221,592 B1	04/24/2001	Schwartz et al.	---
	A49	US-6,255,083 B1	07/03/2001	Williams	---
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	A51	US-6,344,325 B1	02/05/2002	Quake et al.	---
	A52	US-6,355,420 B1	03/12/2002	Chen	---
	A53	US-6,381,871 B1	03/26/2002	Mathies et al.	---
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	A55	US-2003-0022207	01/30/2003	Belasubramanian et al.	---
	A56	US-2003-0084398	04/03/2003	Barnes	---

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Application Number	09/707,737
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Art Unit	1855
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Country Code <sup>2</sup>	Number <sup>3</sup>	Kind Code <sup>4</sup> (if known)				
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	B2	EPO	EP 0 703 364	A1	03/27/1996			<input type="checkbox"/>
	B3	EPO	EP 0 706 004	A2	04/10/1996			<input type="checkbox"/>
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	B9	GB	2 155 152	A	09/18/1985			<input type="checkbox"/>
	B10	GB	2 308 460	A	06/25/1997			<input type="checkbox"/>
	B11	PCT	WO 90/13666	A1	11/15/1990			<input type="checkbox"/>
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	B14	PCT	WO 96/12014	A1	04/25/1996			<input type="checkbox"/>
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	B31	PCT	WO 01/23610	A2	04/05/2001			<input type="checkbox"/>
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	B35	PCT	WO 01/57248	A2	08/09/2001	---		<input type="checkbox"/>
	B36	PCT	WO 01/57249	A1	08/09/2001	---		<input type="checkbox"/>
	B37	PCT	WO 02/00343	A2	01/03/2002	---		<input type="checkbox"/>
	B38	PCT	WO 02/29108	A2	04/11/2002	---		<input type="checkbox"/>
	B39	PCT	WO 02/30488	A2	04/18/2002	---		<input type="checkbox"/>
	B40	PCT	WO 02/061126	A2	08/08/2002	---		<input type="checkbox"/>
	B41	PCT	WO 02/061127	A2	08/08/2002	---		<input type="checkbox"/>
AKH	B42	PCT	WO 03/016565	A2	02/27/2003	---		<input type="checkbox"/>

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RA	C1	ADAM, DAVID "Individual genomes targeted in sequencing revolution", Nature, 2001, p.402, Vol. 411.	
	C2	AMBROSE, W.P. et al. "Single-Molecule Detection With Total Internal Reflection Excitation: Comparing Signal-to-Background and Total Signals in Different Geometries" Cytometry, 1999, p. 224-231, Vol. 36.	
	C3	ARNDT-JOVIN et al. "Immunofluorescence Localization of Z-DNA in Chromosomes: Quantitation by Scanning Microphotometry and Computer-assisted Image Analysis" Journal of Cell Biology, October 1985, pp. 1422-1433, Vol. 101.	
	C4	AXELROD et al. "Total internal reflection fluorescent microscopy", Journal of Microscopy, January 1983, pp. 19-28, Vol. 129, Part 1.	
	C5	AXELROD, DANIEL "Cell-Substrate Contacts Illuminated by Total Internal Reflection Fluorescence" Journal of Cell Biology, April 1981, pp. 141-145, Vol. 89	
	C6	BASCHÉ et al. Chapter 2: "Near-field Optical Imaging and Spectroscopy of Single Molecules" and Chapter 3: "Single-Molecule Detection in Analytical Chemistry", Single Molecule Optical Detection, Imaging, and Spectroscopy, 1997, Published by Weinheim:VCM, Germany.	
	C7	BRASLAVSKY et al. "Objective-type dark-field illumination for scattering from microbeads", Applied Optics, November 2001, p. 5650-5657, Vol. 40, No. 31	
	C8	BRASLAVSKY et al.; "Single Molecule Measurements of DNA Polymerase Activity: A Step Towards Single Molecule Sequencing", Biophysics Journal Abstracts Issue, 2002, p. 507A	
	C9	BRECHTEL et al.; "Control of the electroosmotic flow by metal-salt-containing buffers", J Chromatography A, 1995, pp. 97-105, Vol. 716	
	C10	BRYZEK et al.; "Micromachines on the March", IEEE Spectrum, 1994, pp. 20-31, Vol. 31, No. 5	
	C11	BUCHAILLOT et al.; "Silicon nitride thin films Young's modulus determination by an optical non-destructive method", Jpn. J Appl Phys, 1995, pp. L794-L797, Vol. 38, No. 2:68	
	C12	BURGHARDT et al. "Total Internal Reflection/Fluorescence Photobleaching Recovery Study of Serum Albumin Adsorption Dynamics" Biophys. Journal, March 1981, pp. 455-468, Vol. 33	
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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Application Number	09/707,737
Filing Date	November 6, 2000
First Named Inventor	
Art Unit	1655
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

## **NON PATENT LITERATURE DOCUMENTS**

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RJA	C15	CHIU et al.; "Patterned Deposition of Cells and Proteins onto Surfaces by Using Three-Dimensional Microfluidic Systems", Proc. Natl. Acad. Sci., 2000, pp. 2408-2413, Vol. 97, No. 6	
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<i>[Signature]</i>	C82	UNGER et al.; "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography", Science, April 2000, pp. 113-116, Vol. 288	
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Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

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	C96	YAZDI et al. "Micromachined Inertial Sensors," Proceedings of IEEE, 1998, 86(8):1640-1659.	
	C97	YERSHOV et al. "DNA analysis and diagnostics on oligonucleotide microchips", Proc. National Academy of Science, May 1998, p. 4913-4918, Vol. 93, U.S.A.	
	C98	YOUNG et al. "Contoured elastic-membrane microvalves for microfluidic network integration," J. Biomechanical Engineering, 1999, 121:2-6.	
RJA	C99	ZDEBLICK et al. "A Microminiature Electric-to-Fluidic Valve", Transducers '87, The 4th International Conference on Solid-State Sensors and Actuators. Reprinted in <u>Micromechanics and MEMS Classic and Seminal Papers to 1990, 1997</u> , IEEE Press, USA.	
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